- (3) Rungs shall be continuous members between rails. Each rung of a double-rung ladder (two side rails and a center rail) shall extend the full width of the ladder.
- (4) Width between side rails at the base of the ladder shall be at least 12 inches (30.48 cm) for ladders 10 feet (3.05 m) or less in overall length, and shall increase at least one-fourth inch (0.64 cm) for each additional two feet (0.61 m) of ladder length.
- (g) Portable manufactured ladders obtained after January 21, 1998 shall bear identification showing that they meet the appropriate ladder construction requirements of the following standards:
- (1) ANSI A14.1–1990, Safety Requirements for Portable Wood Ladders;
- (2) ANSI A14.2–1990, Safety Requirements for Portable Metal Ladders;
- (3) ANSI A14.5–1992, Safety Requirements for Portable Reinforced Plastic Ladders.
 - (h) Job-made ladders shall:
- (1) Have a uniform distance between rungs of at least 12 inches (30.48cm) center to center:
- (2) Be capable of supporting a 250-pound (1,112 N) load without deformation; and
- (3) Have a minimum width between side rails of 12 inches (30.48 cm) for ladders 10 feet (3.05 m) or less in height. Width between rails shall increase at least one-fourth inch (0.64 cm) for each additional two feet (0.61 m) of ladder length.
 - (i) The employer shall:
- (1) Maintain portable ladders in safe condition. Ladders with the following defects shall not be used, and shall either be tagged as unusable if kept on board, or shall be removed from the vessel:
- (i) Broken, split or missing rungs, cleats or steps;
 - (ii) Broken or split side rails;
- (iii) Missing or loose bolts, rivets or fastenings:
 - (iv) Defective ropes; or
 - (v) Any other structural defect.
- (2) Ladders shall be inspected for defects before each day's use, and after any occurrence, such as a fall, which could damage the ladder.
- (j) Ladders shall be used in the following manner:

- (1) Ladders shall be securely positioned on a level and firm base.
- (2) Ladders shall be fitted with slipresistant bases and/or be positively secured or held in place to prevent slipping or shifting while in use.
- (3) Except for combination ladders, self-supporting ladders shall not be used as single straight ladders.
- (4) Unless intended for cantilever operation, non-self-supporting ladders shall not be used to climb above the top support point.
 - (5) Ladders shall not be used:
 - (i) As guys, braces or skids; or
- (ii) As platforms, runways or scaffolds.
- (6) Metal and wire-reinforced ladders (even with wooden side rails) shall not be used when employees on the ladder might contact energized electrical conductors.
- (7) Individual sections from different multi-sectional ladders or two or more single straight ladders shall not be tied or fastened together to achieve additional length.
- (8) Single rail ladders (i.e. made by fastening rungs or devices across a single rail) shall not be used.

[62 FR 40202, July 25, 1997, as amended at 65 FR 40944, June 30, 2000]

§ 1918.25 Bridge plates and ramps (See also § 1918.86).

- (a) Bridge and car plates (dockboards). Bridge and car plates used afloat shall be well maintained and shall:
- (1) Be strong enough to support the loads imposed on them;
- (2) Be secured or equipped with devices to prevent their dislodgement;
- (3) Be equipped with hand holds or other effective means to permit safe handling; and
- (4) Be designed, constructed, and maintained to prevent vehicles from running off the edge.³
- (b) *Portable ramps*. Portable ramps used afloat shall be well maintained and shall:
- (1) Be strong enough to support the loads imposed on them:

³When the gap to be bridged is greater than 36 inches (.91m), an acceptable means of preventing vehicles from running off the edge is a minimum side board height of two and three-quarter inches.

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- (2) Be equipped with a railing meeting the requirements of §1918.21(b), if the slope is more than 20 degrees to the horizontal or if employees could fall more than four feet (1.22 m):
- (3) Be equipped with a slip resistant surface:
 - (4) Be properly secured; and
- (5) Be designed, constructed, and maintained to prevent vehicles from running off the edge.⁴

[62 FR 40202, July 25, 1997, as amended at 65 FR 40944, June 30, 2000]

§ 1918.26 Access to barges and river towboats.

- (a) With the exception of §1918.25(b)(2), ramps used solely for vehicle access to or between barges shall meet the requirements of §1918.25.
- (b) When employees cannot step safely to or from the wharf and a float, barge, or river towboat, either a ramp meeting the requirements of paragraph (a) of this section or a safe walkway meeting the requirements of §1918.22(f) shall be provided. When a ramp or walkway cannot be used, a straight ladder meeting the requirements of §1918.24 and extending at least three feet (.91 m) above the upper landing surface and adequately secured or held against shifting or slipping shall be provided. When neither a walkway nor a straight ladder can be used, a Jacob's ladder meeting the requirements of §1918.23 shall be provided. Exception: For barges operating on the Mississippi River System, where the employer shows that these requirements cannot reasonably be met due to local conditions, other safe means of access shall be provided.
- (c) When a barge or raft is being worked alongside a larger vessel, a Jacob's ladder meeting the requirements of §1918.23 shall be provided for each gang working alongside unless other safe means of access is provided. However, no more than two Jacob's ladders are required for any single barge or raft being worked.

(d) When longshoring operations are in progress on barges, the barges shall be securely made fast to the vessel, wharf, or dolphins.

Subpart D—Working Surfaces

§ 1918.31 Hatch coverings.

- (a) No cargo, dunnage, or other material shall be loaded or unloaded by means requiring the services of employees at any partially opened intermediate deck unless either the hatch at that deck is sufficiently covered or an adequate landing area suitable for the prevailing conditions exists. In no event shall such work be done unless the working area available for such employees extends for a distance of 10 feet (3.05 m) or more fore and aft and athwartships.
- (b) Cargo shall not be landed on or handled over a covered hatch or 'tween-decks unless all hatch beams are in place under the hatch covers.
- (c) Missing, broken, or poorly fitting hatch covers that would not protect employees shall be reported at once to the officer in charge of the vessel. Pending replacement or repairs by the vessel, work shall not be performed in the section containing the unsafe covers or in adjacent sections unless the flooring is made safe.
- (d) Hatch covers and hatch beams not of uniform size shall be placed only in the hatch, deck, and section in which they fit properly.
- (e) Small trimming hatches in intermediate decks shall be securely covered or guarded while work is going on in the hatch in which they are found, unless they are actually in use.

§ 1918.32 Stowed cargo and temporary landing surfaces.

- (a) Temporary surfaces on which loads are to be landed shall be of sufficient size and strength to permit employees to work safely.
- (b) When the edge of a hatch section or of stowed cargo may constitute a fall hazard to an employee, the edge shall be guarded by a vertical safety net, or other means providing equal protection, to prevent an employee from falling. When the employer can demonstrate that vertical nets or other equally effective means of guarding

⁴When the gap to be bridged is greater than 36 inches (.91m), an acceptable means of preventing vehicles from running off the edge is a minimum side board height of two and three-quarter inches.